In re Patent Application of:
PAU ET AL.
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In the Claims:

Claims 1-9 (Previously Cancelled).

10. (Previously Added) A method of producing an output bitstream of coded digital video data having a desired bit-rate different from a bit-rate of an input bitstream of coded digital video data, the method comprising:

dividing the input bitstream into a sequence of coded data and into a sequence of control bits;

modifying the sequence of control bits as a function of the desired bit-rate of the output bitstream for producing an output sequence of control bits;

decoding the sequence of coded data for producing an intermediate sequence of data;

quantizing with a pre-established step and coding the intermediate sequence of data for producing an output sequence of coded data; and

merging the output sequence of control bits and the output sequence of coded data for producing the output bitstream of coded digital video data having the desired bit-rate.

11. (Previously Added) A method according to Claim 10 wherein the intermediate sequence of data is dequantized before being quantized with the pre-established step.

12. (Previously Added) A method according to Claim 10 wherein the input and output bitstreams of coded digital video data comprise MPEG data.

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13. (Previously Added) A method according to Claim
10 wherein the input and output bitstreams of coded digital
video data comprise MPEG2 data.

14. (Previously Added) A method according to Claim
10 wherein the decoding comprises performing a Huffman
decoding followed by a run-length decoding; and wherein coding
comprises performing a run-length coding followed by a Huffman
coding.

15. (Previously Added) A method according to Claim
10 wherein quantizing with the pre-established step comprises
a feed-back rate control technique.

16. (Previously Added) A method according to Claim
10 wherein quantizing with the pre-established step comprises
a feed-back/forward hybrid rate control technique.

17. (Previously Added) A method of producing an
output bitstream of coded digital video data having a desired
bit-rate different from a bit-rate of an input bitstream of
coded digital video data, the method comprising:
dividing the input bitstream into a sequence of
coded data and into a sequence of control bits;
modifying the sequence of control bits as a function
of the desired bit-rate of the output bitstream for producing
an output sequence of control bits;
decoding the sequence of coded data using a Huffman
decoding followed by a run-length decoding for producing an
intermediate sequence of data;

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quantizing with a pre-established step and coding the intermediate sequence of data using a run-length coding followed by a Huffman coding for producing an output sequence of coded data; and

merging the output sequence of control bits and the output sequence of coded data for producing the output bitstream of coded digital video data having the desired bit-rate.

18. (Previously Added) A method according to Claim 17 wherein the intermediate sequence of data is dequantized before being quantized with the pre-established step.

19. (Previously Added) A method according to Claim 17 wherein the input and output bitstreams of coded digital video data comprise MPEG data.

20. (Previously Added) A method according to Claim 17 wherein the input and output bitstreams of coded digital video data comprise MPEG2 data.

21. (Previously Added) A method according to Claim 17 wherein quantizing with the pre-established step comprises a feed-back rate control technique.

22. (Previously Added) A method according to Claim 17 wherein quantizing with the pre-established step comprises a feed-back/forward hybrid rate control technique.

23. (Previously Added) A device for producing a

bitstream of coded digital video data having a bit-rate different from a bit-rate of an input bitstream of coded digital video data, the device comprising:

a first circuit for separating the input bitstream into a sequence of coded data and into a sequence of control bits;

a second circuit having an input for receiving the sequence of control bits, said second circuit for generating a modified sequence of control bits as a function of the desired bit-rate of the output bitstream for providing an output sequence of control bits;

a decoder having an input for receiving the sequence of coded data and an output for providing an intermediate sequence of data;

a quantizer for quantizing the intermediate sequence of data with a pre-established step;

an encoder connected to an output of said quantizer for providing an output sequence of coded data; and

a third circuit for merging the output sequence of control bits and the output sequence of coded data for producing the output bitstream having the desired bit-rate.

24. (Previously Added) A device according to Claim 23 further comprising a dequantizer connected between said decoder and said quantizer for dequantizing the intermediate sequence of data.

25. (Previously Added) A device according to Claim 23 wherein the input and output bitstreams of coded digital video data comprises MPEG data.

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26. (Previously Added) A device according to Claim 23 wherein the input and output bitstreams of coded digital video data comprises MPEG2 data.

27. (Previously Added) A device according to Claim 23 wherein said decoder comprises a Huffman decoder and a run-length decoder connected in series thereto.

28. (Previously Added) A device according to Claim 23 wherein said encoder comprises a run-length coder and a Huffman coder connected in series thereto.

29. (Previously Added) A device according to Claim 23 further comprising a bit rate control circuit connected to said encoder for setting quantizing of the intermediate sequence of data by said quantizer.

30. (Previously Added) A device according to Claim 23 wherein said third circuit comprises a multiplexer connected to outputs of said first circuit, said second circuit and said encoder.

31. (Previously Added) A device for producing a bitstream of coded digital video data having a bit-rate different from a bit-rate of an input bitstream of coded digital video data, the device comprising:
a first circuit for separating the input bitstream into a sequence of coded data and into a sequence of control bits;

a second circuit having an input for receiving the sequence of control bits, said second circuit for generating a modified sequence of control bits as a function of the desired bit-rate of the output bitstream for providing an output sequence of control bits;

a decoder having an input for receiving the sequence of coded data and an output for providing an intermediate sequence of data, said decoder comprising a Huffman decoder and a run-length decoder connected in series thereto;

a quantizer for quantizing the intermediate sequence of data with a pre-established step;

an encoder connected to an output of said quantizer for providing an output sequence of coded data, said encoder comprising a run-length coder and a Huffman coder connected in series thereto; and

a third circuit for merging the output sequence of control bits and the output sequence of coded data for producing the output bitstream having the desired bit-rate.

32. (Previously Added) A device according to Claim 31 further comprising a dequantizer connected between said decoder and said quantizer for dequantizing the intermediate sequence of data.

33. (Previously Added) A device according to Claim 31 wherein the input and output bitstreams of coded digital video data comprises MPEG data.

34. (Previously Added) A device according to Claim 31 wherein the input and output bitstreams of coded digital

video data comprises MPEG2 data.

35. (Previously Added) A device according to Claim 31 further comprising a bit rate control circuit connected to said encoder for setting quantizing of the intermediate sequence of data by said quantizer.

36. (Previously Added) A device according to Claim 31 wherein said third circuit comprises a multiplexer connected to outputs of said first circuit, said second circuit and said encoder.